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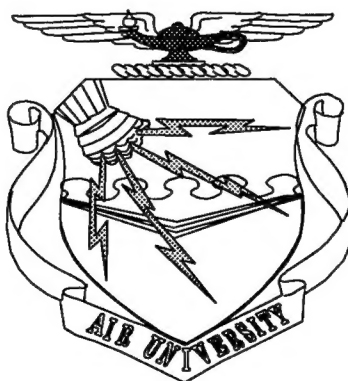
Flying Hour Consumable Supplies:
More Than Mere Nuts and Bolts

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EXECUTIVE SUMMARY

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Accounting for Air Force flying hour consumable supply costs has been less than 100 percent accurate over the last decade. Various attempts have been made to clearly define and account for these supply costs associated with aircraft operations. To date, there is still confusion in the field on what exactly constitutes flying hour consumable supplies. In this paper, I will deal with two areas associated with accounting for these flying related costs: definition and unique accounting codes.

Declining budgets are driving increased scrutiny to reduce costs in operating our aircraft systems. Programs are being put under the microscope to identify and justify flying hour costs. Due to various factors such as: mission profiles, age of the fleet, geographic location, and flying styles; to name just a few, no two wings fly the same aircraft at exactly the same cost. While this complicates the analysis process, we as financial analysts should be able to develop a clear and accurate "a la carte" type cost menu to identify the "core" cost of maintaining a given aircraft.

Currently, no one can give that flying commander in the field a definition he can be comfortable with when it comes to spending his operations and maintenance dollars to operate his assigned aircraft. Increased emphasis is needed when it comes to accounting for costs of flying hour consumable supplies. We must eliminate the confusion that exists in the field, as well as higher headquarters, by improving the current accountability system. A unique accounting code to distinguish the commodity, combined with a clear definition of what should be coded against that commodity, are necessary for us to accomplish meaningful analysis on this highly visible program.

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INTRODUCTION

What are flying hour consumable supplies? Up until FY92, when wing financial analysts used the term "flying hour program", they were referring to consumable supplies used to maintain their wing's aircraft. With the decentralization of funding for Depot Level Reparables (DLRs) and Aviation Petroleum, Oil, and Lubricants (AVPOL) to the wing level and Depot Purchased Equipment Maintenance (DPEM) to the MAJCOM level, the term flying hour program has taken on a new meaning with a significantly larger scope. In Pacific Air Forces consumable supplies went from comprising 100 percent of the program to a mere 12 percent of the new four part program.

For over a decade the financial community has wrestled with the task of establishing metrics to fund the flying hour consumable supplies program. The task was complicated by the fact that they are not clearly defined nor do they have their own unique accounting codes. Metrics for consumable supplies had been evolving until the decentralization of DLRs, AVPOL, and DPEM. Due to the size of these new programs, and the workload involved in transitioning them to wing and MAJCOM levels, analytical focus shifted. As a result, the emphasis followed the dollars, and work on the consumable supplies program was left unfinished. With the close scrutiny flying hour programs are receiving, accurate and effective accountability is crucial. In this paper, I will discuss two areas related to flying hour consumable supplies that, with additional attention, could achieve improved accountability: definition and unique accounting codes.

BACKGROUND

Dating back to FY80, and probably earlier, financial analysts have been plagued with the problem of planning, programming, and budgeting for flying hour consumable supplies using a less than perfect system. At that time there was no Air Force-wide definition of what constituted flying hour consumable supplies. Each Major Command (MAJCOM) had their own definition and distributed funding, tracked expenditures, and performed analysis based on their command unique definition. While this worked at wing level, the MAJCOMs were faced with converting real world execution into specific cost per hour factors used by Air Staff.

The problem was more than just how to convert the numbers from one level to another, it was a matter of different philosophies in some cases. While one command might consider flying hour related costs to include any costs directly or indirectly related to maintaining the aircraft, another might use a stricter definition and only include costs directly related to maintaining the aircraft. Even putting aside the issue of direct versus indirect, it was open to interpretation when they started using more general terms such as "support of the flying mission" instead of "maintenance of the aircraft". When the consumable supply data was rolled up to the aggregate level at Air Staff, there was no way to draw accurate comparisons. The numbers were simply averaged out, and at the macro level the program worked out.

Due to the growth of the flying hour program at wing and MAJCOM level as a result of funding decentralization, wings and MAJCOMs have come under more and more scrutiny to justify not only current funding requirements, but also to reduce spending from their current levels

(i.e. ongoing weapon systems cost reduction effort). To make the analytical task even tougher, commands must explain variances in costs between flying wings with the same type aircraft and also explain variances from other commands with the same type aircraft. As should be apparent, this is a daunting task, even with the best accounting system. Unfortunately, there are inconsistencies between and within commands on what is considered a flying hour expense. These inconsistencies are predominantly in the flying hour consumable supplies area (i.e. nuts, bolts, gaskets, etc...). Due to various factors such as: mission profiles, age of the fleet, aircraft block number, geographic location, training, and flying styles (i.e. heavy/light afterburner use, high G/low G preferences, etc...); no two wings fly the same aircraft at exactly the same cost. Before the Air Force can hope to develop a clear and accurate "a la carte" type cost menu to identify the "core" cost of maintaining an aircraft, along with command specific costs, they must ensure that all personnel involved in working with the program understand, agree upon, and use the same definition.

Over the years, an Air Force-wide definition has been developed and refined. In FY91, the Air Force came out with the definition still in use today. However, after working the issue for 15 years, the same question remains: What are flying hour consumable supplies?

DISCUSSION

Flying hour consumable supplies are defined as: expenditures against Element of Expense/Investment Codes (EEICs) 605 and 609 that are captured within Functional Category (FC) 03 in Responsibility Center/Cost Centers (RCCCs) XX20XX through XX25XX, XX2EXX, XX2GXX, and XX2RXX. These are the parameters used by SAF/FMC when compiling the Air Force's flying hour cost factors. They are the closest thing to a definition analysts have to work with when trying to quantify flying hour consumable supplies. These parameters specify what commodities, EEIC 605 (supplies purchased from the Systems Support Division of the stock fund) and EEIC 609 (supplies purchased from the General Support Division of the stock fund) qualify. They also state what accounts are used: FC 03 is Maintenance of Materiel, and the RCCCs are for areas such as propulsion, avionics, and sortie generation. On the surface, this definition seems very clear and specific. However, real world application raises problems at the wing and MAJCOM levels.

For modeling purposes the Air Staff uses EEICs 60502/60902 unique to their Automated Budget Interactive Data Environment System (ABIDES) computer system that allow them to easily segregate the flying hour consumable supplies funded program. However, when it comes to reviewing actual costs, accounting systems at all levels lack the capability to extract obligation data by EEIC alone. This is not the case with the other three components of the flying hour program (DLRs, DPDM, and AVPOL), which can be extracted from accounting systems at all levels by EEIC alone.

Accounting for flying hour consumable supplies starts at the wing level, where obligation data originates in the standard base supply system computer. It then interfaces with the accounting and finance

computer system. The interface updates at the 3 digit EEIC level. The data from base accounting and finance computer systems are then rolled up to the MAJCOM and eventually Air Staff levels. Because it is at the three digit level, all supply expenditures are combined. This results in confusion because flying hour consumable supplies can not be identified at the commodity level (EEIC). EEICs 605 and 609 are not unique to the flying hour program. They represent flying and non-flying supplies. The discriminating factor that classifies them as flying hour supplies is if the expenditures are in one of the designated RCCC's. This means they are defined by where they are purchased as much as by what is purchased. Without unique commodity accounting codes, flying hour consumable supplies lack a unique identity. While technically an analyst can extract the costs after a few iterations of manipulating the financial data, they appear less accurate compared to other flying hour components with clear definitions and their own accounting codes.

To further understand how the accounting process actually works, we must start at square one. At the lowest level, each wing organization has an account(s) established in the base supply computer which they use to charge against. When these accounts are initially established in the supply computer, certain parameters are set. One of the parameters is whether the account will be used to purchase aircraft parts. If it will, it is given a type org code of 7 (this can be checked on the Project Fund Management Record (PFMR)/Organizational Cost Center Record (OCCR) Directory available from base supply). When a maintainer goes to purchase a part, such as an avionics part carried by the systems support division of the stock fund, he charges it against one of his accounts. If this were a depot

level reparable item and it was purchased in an aircraft parts account, it would be coded against EEIC 644 Flying DLR. If it was purchased in any other type account, it would be coded against EEIC 645 Non-Fly DLR. Since it is a consumable supply and not a DLR item, it will be coded against EEIC 605 regardless of what account is used.

When a financial analyst queries the accounting system for obligation information about the flying hour funding program, the lowest level of breakout is at the commodity level (EEIC). The following rules apply when reviewing the data: EEIC 644 is Flying DLRs and EEIC 645 is Non Fly DLRs, EEIC 699 is Flying AVPOL and EEIC 693 is Non Fly AVPOL, EEICs 605/609 are flying hour consumable supplies when in FC 03 and RCCC XX20XX through XX25XX, XX2EXX, XX2GXX, XX2RXX and EEICs 605/609 are Non Flying Consumable Supplies when obligated against any other RCCCs. It should be clear by now that without their own unique EEICs, accounting for consumable supplies is more complicated than for the other commodities in the flying hour program.

While accounting for consumable supplies may simply appear a bit more involved, you must remember that the primary mission of the maintainer who is purchasing the supplies is to get the aircraft flying, not to become an accountant. He must decide which account to use and whether an item is a valid flying hour cost. Without clear criteria to determine the type of supply item, he may either take his best guess or stop the maintenance process and go over to the organizational financial analyst to find out exactly what constitutes flying hour consumable supplies. The answer he will probably receive is "You know, things like nuts and bolts." When he asks for a more specific definition, the financial analyst will fall back on the only

definition he is sure of: supply items in EEICs 605/609 purchased against FC 03, RCCCs XX20XX through XX25XX, XX2EXX, XX2GXX, and XX2RXX. At this point, the maintainer will probably scratch his head, walk back to his shop, and due to tight budgets, charge the item against any account that will not reject due to lack of funds availability. Six months later, the financial analyst will be scratching his head when trying to figure out why the cost per hour spiked downward six months earlier. While the scenario may seem amusing, it is not unheard of at flying wings.

At wing level, using a definition based on location is like using a form of the word in the definition, it starts a cycle with no beginning. This "Which came first: the chicken or the egg?" definition causes great confusion. When asked by a commander what qualifies as flying hour consumable supplies, the typical answer is parts like nuts, bolts, and gaskets. This answer will usually satisfy most people in a briefing type environment. However, when they go out into the maintenance shops and see all the items being purchased, further clarification is necessary. The commander will probably ask for a list of all items purchased. Then comes the dreaded question: "Which of the items are valid flying hour consumable supplies?" At this point, the system breaks down and the chicken or the egg discussion will not work. It seems unreasonable that the same item purchased from the same source, by the same person, can be either flying or non-flying. With the computer systems and coding structure currently available, we should be able to define this multimillion dollar program with more detail than: It depends on where it is purchased.

CONCLUSION

While accounting for flying hour consumable supply costs is accomplished daily, there are parts of the process that require additional attention.

Until a more functional definition is developed, it will be next to impossible to compare cost per hour data to the increasing level of detail being required. There are obvious variables such as mission profile, age of the fleet, and environment that impact the cost per hour. Then there are other not so obvious variables such as squadron training, and flying styles that also contribute to the cost per hour. Determining a "core" cost per hour is already difficult with all the variables associated with the program. If there are variances between wings in what is purchased against flying hour accounts, comparisons lose their usefulness.

As long as flying hour consumable supplies share the same accounting codes (EEICs 605 and 609) with the non-flying mission, confusion will cloud the program. For personnel who work with the accounting system, EEICs are the foundation of any program. Without unique EEICs for flying hour consumable supplies, the program seems to lack its own identity.

The flying hour funding program no longer enjoys the protected status it had during the period of military buildup. The draw down has generated weapon systems cost reduction efforts dependent on financial information provided by wings/MAJCOMs. It is critical that the information we are providing to decision makers is as accurate as we can make it.

RECOMMENDATION

I recommend two courses of action in regards to the flying hour consumable supplies program.

First, a definition of what qualifies as flying hour consumable supplies needs to be developed and distributed to the field. This definition should not be based on where an item is purchased, but what an item is and how it relates to the flying mission. It is clear that a bolt for an engine turbine is a valid flying hour cost and a coat rack for the flying squadron orderly room is not, but there is a lot of gray area in between. The definition need not go to the extreme of being an all inclusive list of parts, but it should include a formalized list of criteria, with examples personnel can use to see if an item falls into a valid flying hour related category.

Second, separate EEICs must be identified for use with flying hour consumable supplies, possibly 646 and 647. Our current accounting system can be programmed to break out a supply item between 605 and 646 as is currently done between DLR EEICs 644 and 645. It should be noted that the same location based definition applies to the DLR program, but because it has its own distinctive EEICs there is no confusion.

With a clearer definition of what constitutes flying hour consumable supplies, and a way to extract that information easily out of the accounting system, analysts could stop spending the majority of their time just trying to get the wing data to a point where it is an "apples to apples" comparison. Analysts could then focus their efforts more efficiently on determining how variables effect operational costs.